

Application No.: 09/692,075
Amendment dated: March 1, 2004
Reply to Office Action of September 29, 2003

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This listing of claims will replace all prior versions and listings of claims in this application:

a.) Listing of Claims

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. (Cancelled)
12. (Cancelled)
13. (Cancelled)
14. (Cancelled)
15. (Cancelled)
16. (Cancelled)
17. (Cancelled)
18. (Cancelled)
19. (Cancelled)
20. (Cancelled)
21. (Cancelled)
22. (Cancelled)
23. (Cancelled)
24. (Cancelled)
25. (Cancelled)

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26. (Currently Amended) A method of transferring data from a holographic master first surface to another surface surfaces via a seamless transfer medium comprising a polyimide material, said the method comprising the steps of:

(a) providing the seamless transfer medium by casting said the polyimide material transfer medium on the holographic master a surface containing said the data so that an impression of diffraction gratings of the holographic master is made on the cast polyimide material; wherein said casting includes

(b) removing separating said the seamless transfer medium with the impression of the diffraction gratings from said surface the holographic master containing said data such that said transfer medium includes said data; and

(c) (b) using said the seamless transfer medium to transfer said emboss the data to said another surface surfaces.

27. (Cancelled)

28. (Currently amended) A method of embossing data from a seamless embossing surface to another surfaces, said method comprising the steps of:

(a) spin coating a photodefinable polyimide material on a roller and heat pre-curing a the polyimide material to form said seamless embossing surface of a target thickness;

(b) cooling said seamless embossing surface to ambient temperature;

(c) profiling said seamless embossing surface by two interfering laser beams EMF radiation to form diffraction patterns to define said data on said seamless embossing surface; and

(d) wet developing said data on said seamless embossing surface by using a solution;

(e) heat curing of the seamless embossing surface; and

(f) embossing said another surfaced with said data by said seamless embossing surface.

29. (Currently amended) A method of transferring data from a first seamless surface to another surface other surfaces, said method comprising the steps of:

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- (a) spin coating a photodefinable polyimide material on a roller and heat pre-curing a the polyimide material to form said first seamless surface of polyimide;
- (b) cooling said seamless embossing surface to ambient temperature;
- (c) profiling said first surface by an external manipulation two interfering laser beams to define said data on said first seamless surface of polyimide;
- (d) wet developing said data on said first seamless surface with a solution; and
- (e) coating said first seamless surface of the polyimide material with a metal and applying ink to said first surface; and
- (f) contacting other surfaces by said first seamless surface to apply transfer ink corresponding to said data to said another surface other surfaces.

30. (Canceled).

31. (Canceled)

32. (New) The method of Claim 28, wherein profiling said seamless embossing surface is accomplished in a pixel-by-pixel dot matrix manner.

33. (New) The method of Claim 28, wherein heat curing of the seamless embossing surface is done at a temperature selected from a range of about 280° C to about 400° C.

34. (New) The method of Claim 28, wherein heat curing of the seamless embossing surface is done in a nitrogen atmosphere.

35. (New) The method of Claim 28, wherein using a solution comprises using an aqueous solution.

36. (New) The method of Claim 28, wherein the photodefinable polyimide is a negative acting polyimide.

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37. (New) The method of Claim 29, wherein profiling said seamless embossing surface is accomplished in a pixel-by-pixel dot matrix manner.
38. (New) The method of Claim 29, wherein heat curing of the seamless embossing surface is done at a temperature selected from a range of about 280° C to about 400° C.
39. (New) The method of Claim 29, wherein heat curing of the seamless embossing surface is done in a nitrogen atmosphere.
40. (New) The method of Claim 29, wherein using a solution comprises using an aqueous solution.
41. (New) The method of Claim 29, wherein the metal comprises Ni or Cr.
42. (New) The method of Claim 29, wherein the photodefinable polyimide is a negative acting polyimide.
43. (New) A method of making a seamless profiled surface, the method comprising:
spin coating a roller with a photodefinable polyimide material and heat pre-curing the roller to form a seamless polyimide surface of a target thickness;
cooling the roller to an ambient temperature;
interfering two laser beams on the seamless polyimide surface to profile the seamless polyimide surface with diffractions patterns in a pixel-by-pixel dot matrix manner;
wet developing the seamless polyimide surface on the roller with a solution; and
heating the seamless polyimide surface on the roller to harden the surface.
44. (New) The method of Claim 43, wherein the photodefinable polyimide material is negative acting.